

CLAIMS MARKED TO SHOW CHANGES MADE

1. An alternator for a vehicle, comprising

two pole pieces having mutually interlaced poles, and

a magnet, the poles including grooves profiled substantially axially along peripheral sides of each pole body, wherein the grooves engage the magnet between two interlaced poles, the groove profile preventing the magnet from escaping perpendicularly from the grooves, and

a strip interposed between a face of the magnet and a first portion of at least one of the grooves, the strip being produced from a nonmagnetic material which is less hard than the magnet.

2. The alternator as claimed in claim 1, wherein the strip is interposed between the magnet and the first portion of each of the grooves.

3. The alternator as claimed in claim 1 wherein the strip covers a circumferential face of the magnet.

4. The alternator as claimed in claim 3, wherein the circumferential face is oriented in a direction opposite to a shaft of the alternator.

5. (Two Times Amended) The alternator as claimed in claim 1, [which comprises two] further comprising a second strip produced from a nonmagnetic material which is less hard than the magnet, the strips interposed between respective opposed faces of the magnet and the first portion and a second portion respectively of at least one of the grooves.

6. The alternator as claimed in claim 1, wherein the groove profile of each groove is "U"-shaped.

7. The alternator as claimed in claim 1, wherein the groove profile of each groove is "V"-shaped, the "V"-shaped groove profile having a first branch which is locally parallel to a circumferential face of the poles.

8. The alternator as claimed in claim 7, wherein the "V"-shaped groove profile has two branches, the first branch closer to a shaft of the alternator than the other branch.
9. The alternator as claimed in claim 1, further comprising a layer of adhesive which is more flexible than the magnet and is interposed between the strip and the magnet.
10. The alternator as claimed in claim 9, wherein the magnet includes two separate parts bonded to one another by a layer of material which is more flexible than the magnet.
11. The alternator as claimed in claim 10, wherein the material is identical to the adhesive.
12. The alternator as claimed in claim 1 having a plurality of magnets and a plurality of strips, wherein at least two of the plurality of magnets are associated with respective strips.
13. The alternator as claimed in claim 12, wherein a majority of the magnets are associated with respective strips.
14. The alternator as claimed in claim 12, wherein the strips comprise parts that are independent of one another.
15. The alternator as claimed in claim 1, wherein the strip comprises glass fiber embedded in pre-impregnated plastic.
16. An alternator for a vehicle, the alternator comprising:
 - a magnet;
 - two pole pieces having mutually interlaced poles, the poles having grooves profiled substantially axially along peripheral sides of each pole body, the magnet interposed in the grooves between two interlaced poles, the groove profile preventing the magnet from escaping the grooves in a plane perpendicular to the groove profile; and
 - a first strip of nonmagnetic material less hard than the magnet, the first strip interposed between the magnet and a first portion of at least one of the grooves.

17. The alternator of claim 16 wherein the first strip is interposed between the magnet and the first portion of each of the grooves.
18. The alternator of claim 16 wherein the first strip covers a circumferential face of the magnet.
19. The alternator of claim 18 wherein the circumferential face is oriented in a direction opposite to a shaft of the alternator.
20. (Two Times Amended) The alternator of claim 16 further comprising a second strip of nonmagnetic material, the first strip and the second strip interposed between respective opposed faces of the magnet and the first portion and a second portion respectively of at least one of the grooves.
21. The alternator of claim 16 wherein each groove is "U"-shaped.
22. The alternator of claim 16 wherein each groove is "V"-shaped, with a first branch of each "V"-shaped groove locally parallel to a circumferential face of the poles.
23. The alternator of claim 22 wherein the first branch is closer to a shaft of the alternator than the other branch of the "V"-shaped groove.
24. The alternator of claim 16 further comprising a layer of adhesive more flexible than the magnet, the layer of adhesive interposed between the first strip and the magnet.
25. The alternator of claim 24 wherein the magnet includes two separate magnet portions bonded to one another by a layer of material more flexible than each of the magnet portions.
26. The alternator of claim 25 wherein the material of the layer is identical to the adhesive.

27. (Two Times Amended) The alternator of claim 16 comprising a plurality of magnets and a plurality of strips, wherein at least two of the plurality of magnets are associated with respective strips.
28. The alternator of claim 27 wherein the respective strips comprise parts that are independent of each other.
29. The alternator of claim 16 wherein the first strip comprises glass fiber embedded in pre-impregnated plastic.
30. An alternator for a vehicle, the alternator comprising:
 - a magnet;
 - two pole pieces having mutually interlaced poles, the poles having grooves profiled substantially axially along peripheral sides of each pole body, the magnet interposed in the grooves between two interlaced poles, the groove profile preventing the magnet from escaping perpendicularly from the grooves;
 - a strip of nonmagnetic material less hard than the magnet, the strip interposed between the magnet and a portion of at least one of the grooves, the strip covering a circumferential face of the magnet oriented in a direction opposite to a shaft of the alternator; and
 - a layer of adhesive more flexible than the magnet, the layer of adhesive interposed between the strip and the magnet.